Application Serial No. 09/739,940
Examiner My-Chau T. Traii
Group art Unit: 1639
Attorney Docket No. 30626-101

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Currently Amended) A method for the analysis of a sample comprising:
- (a) depositing a continuous film having optical properties and species adsorption properties essentially the same as optical properties and species adsorption properties of bulk material of the continuous film:
- (a) (b) applying after deposition of the continuous film, said the sample to a said deposited continuous film by either adsorption or directly to a surface of said deposited continuous film, said deposited continuous thin film having a desired tailored morphology, said deposited continuous thin film being substantially void free; and
- (b) (c) analyzing said the sample by light desorption/ionization mass spectroscopy, after the sample has been applied to the deposited continuous film.
- 2. (Previously Presented) A method according to claim 1, wherein said sample is selected from the group consisting of organic chemical compositions, inorganic chemical compositions, biochemical compositions, drugs, drug metabolites, cells, cell material, micro-organisms, peptides, polypeptides, proteins, lipids, carbohydrates, nucleic acids, and combinations thereof.
- 3. (Previously Presented) A method for sample analysis according to claim 2, further comprising obtaining said sample from the group consisting of: a fluidic system, a microfluidic system, a nanofluidic system, a micro chromatographic system, a nano chromatographic system, a high-throughput isolation and preparation system, and combinations thereof.

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4-5 (Canceled)

- 6. (Currently Amended) A method according to claim 1, wherein said deposited thin film selected from the group consisting of: silicon, germanium, carbon, hydrogen and mixtures thereof.
- 7. (Currently Amended) A method according to claim 1, wherein the material used as said deposited continuous thin film is selected using criteria selected from the group consisting of light reflection, optical absorption, species absorption, analyte adsorption, ambient adsorption, analyte drying, and combinations thereof.
- 8. (Canceled)
- 9. (Canceled)
- 10. (Currently Amended) A method according to claim 1, further comprising, physically or chemically modifying said continuous film, surface functionalizing said continuous film, or parterning said continuous thin film prior to analyzing said sample.
- 11. (Currently Amended) A method according to claim 10, wherein patterning said continuous than film is by: lithography comprising photolithography, probe, contact printing, imprinting, soft lithography; stamping; screen masking; printing or physically modifying said film or a subsequently positioned sample.
- 12. (Previously Presented) A method according to claim 10 wherein said physically or chemically modifying comprises reaction with or adherence with organic or inorganic compounds, cells, cell components, tissues, microorganisms and combinations thereof.
- 13. (canceled)

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14. (Previously Presented) A method according to claim 1, wherein analyzing said sample is by

laser desorption-ionization mass spectroscopy.

15. (Previously Presented) A method according to claim 1, wherein prior to analyzing said

sample, a signal enhancing agent is integrated with said sample.

16. (Previously Presented) A method according to claim 15 wherein said signal enhancing agent

is ammonium citrate.

17. (Currently Amended) A method according to claim 1, wherein applying said sample to said

continuous thin film is by either (a) absorbing from a solid, liquid or gas; or (b) directly applying

to the surface of said deposited continuous thin film as a solid or liquid, or combination thereof.

18. (Previously Presented) A method according to claim 17 wherein said sample is obtained

from a separation means selected from at least one of the group consisting of: chemical, physical,

and electrical separation means.

19. (Previously Presented) A method according to claim 18 wherein said separation means is

selected from at least one of the group consisting of: liquid chromatography, gas

chromatography, deposited thin film chromatography, size exclusion chromatography, affinity

chromatography, gel electrophoresis, capillary or micro-capillary electrophoresis, and blotting.

20 - 21 (Canceled)

22 - 65 (Withdrawn)

66. (Currently Amended) A method according to claim 1, wherein said deposited continuous

thin film is deposited on a substrate selected from the group consisting of silicon,

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semiconductors, insulators, glasses, plastics, polymers, metals, ceramics, and combinations thereof.

67. (Currently Amended) A method according to claim 1, wherein said deposited continuous thin film is deposited by chemical vapor deposition, physical vapor deposition, plasma enhanced chemical vapor deposition, hot wire deposition, nebulization, evaporation, sputtering, casting, spin coating, and combinations thereof.

68. (Canceled)

69. (Previously Presented) A method according to claim 2, wherein said sample is a gas, liquid, solid, or combination thereof found in the general indoor environment, general outdoor environment, a process environment, and equipment environment.

70. (Previously Presented) A method according to claim 2, wherein said sample is a cell, plurality of cells, tissue, components thereof, and combinations thereof.

71-118 (Canceled)

119-124. (Withdrawn)

125. (New) The method of claim I wherein said deposited continuous film comprises a semiconductor film.